

## APPENDIX A. SAR PLOTS

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: GSM850 RIGHT CHEEK TOUCH\_190CH\_1D N4313\_NUMERIC
- Test Date: 07/01/2014
- Measured Liquid Temperature: 22.5 °C, Ambient Temperature: 22.1 °C

Communication System: UID 0, GSM 850 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 836.6 MHz; Communication System PAR: 9.191 dB; PMF: 2.88104

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.478$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.39, 6.39, 6.39); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Right/Touch/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.422 W/kg

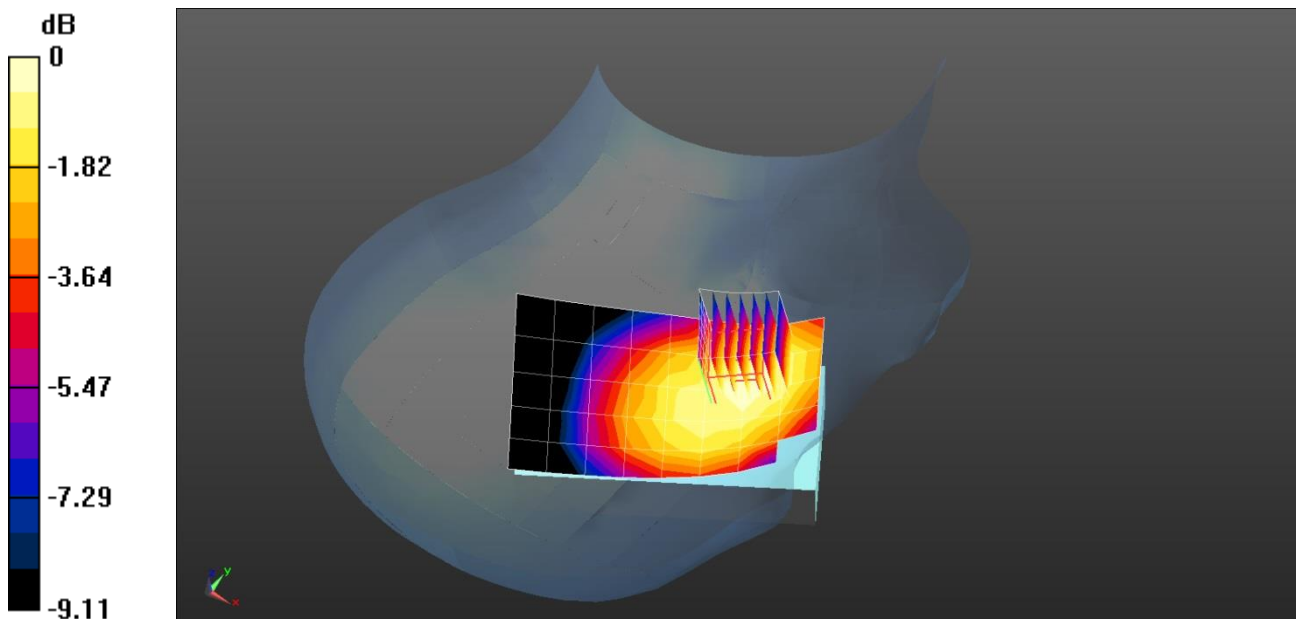
**Right/Touch/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 10.708 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.497 W/kg

**SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.294 W/kg**

Maximum value of SAR (measured) = 0.423 W/kg



- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: GSM850 BODY REAR 1.5cm\_190CH\_1D N4313\_NUMERIC
- Test Date: 07/03/2014
- Measured Liquid Temperature: 22.7 °C, Ambient Temperature: 22.1 °C

Communication System: UID 0, GSM 850 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 836.6 MHz; Communication System PAR: 9.191 dB; PMF: 2.88104

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 55.858$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.17, 6.17, 6.17); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Rear/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.523 W/kg

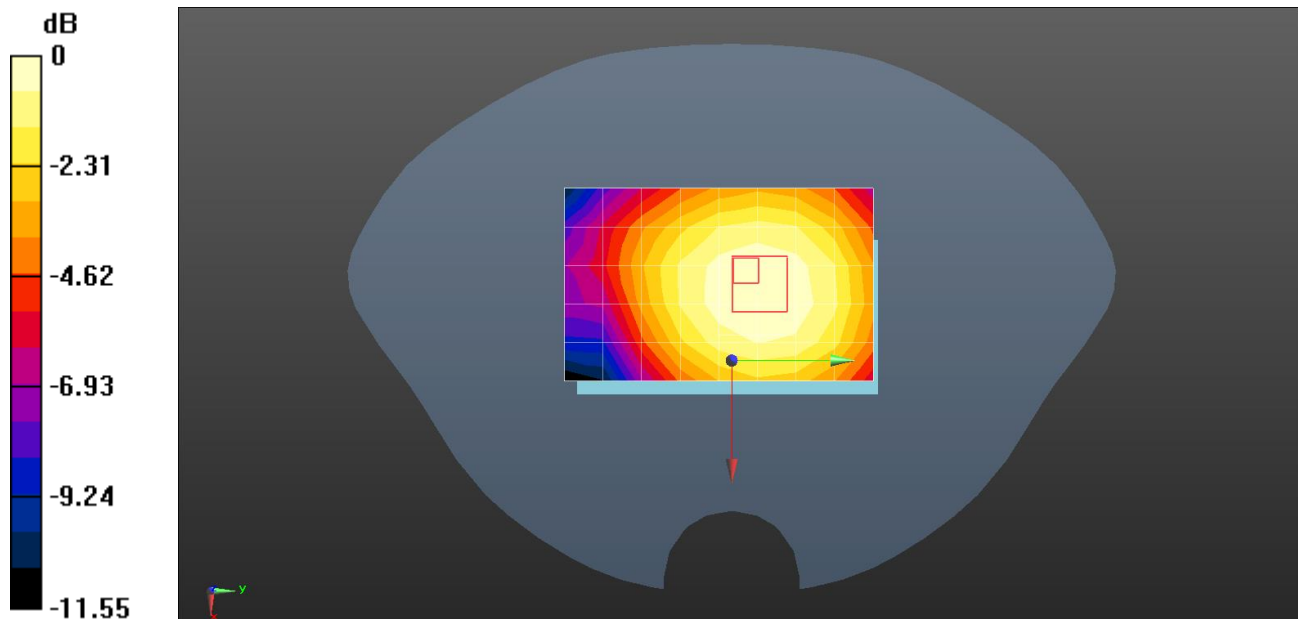
**Body/Rear/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 23.555 V/m; Power Drift = -0.49 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.535 W/kg; SAR(10 g) = 0.214 W/kg**

Maximum value of SAR (measured) = 0.521 W/kg



0 dB = 0.523 W/kg = -2.81 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: GSM1900 LEFT CHEEK TOUCH\_661CH\_1D N4313\_NUMERIC
- Test Date: 07/07/2014
- Measured Liquid Temperature: 22.3 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, DCS 1900 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz; Communication System PAR: 9.191 dB; PMF: 2.88104

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.85, 4.85, 4.85); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Left/Touch/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.161 W/kg

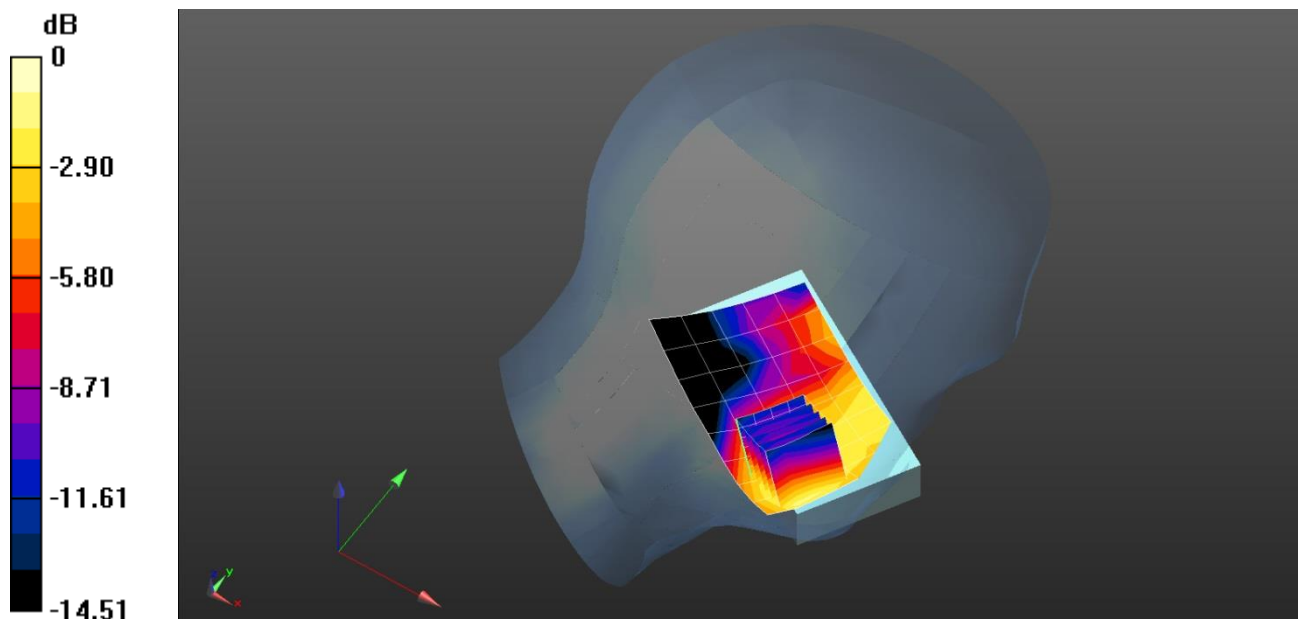
**Left/Touch/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 4.437 V/m; Power Drift = 0.25 dB

Peak SAR (extrapolated) = 0.218 W/kg

**SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.091 W/kg**

Maximum value of SAR (measured) = 0.170 W/kg



0 dB = 0.170 W/kg = -7.70 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: GSM1900 BODY REAR 1.5cm\_661CH\_2D N560x\_NUMERIC
- Test Date: 07/09/2014
- Measured Liquid Temperature: 22.2 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, GPRS 1900 2tx (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz; Communication System PAR: 6.18 dB; PMF: 2.03704

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.57$  S/m;  $\epsilon_r = 51.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.41, 4.41, 4.41); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Rear/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.285 W/kg

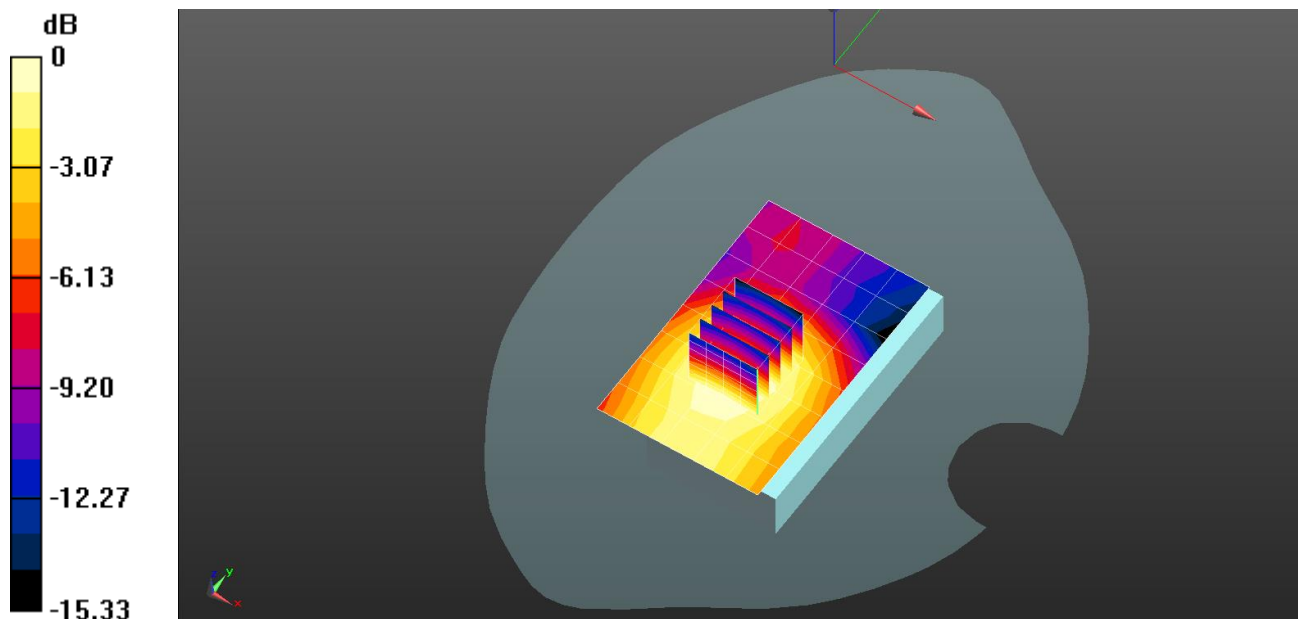
**Body/Rear/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 11.479 V/m; Power Drift = -0.36 dB

Peak SAR (extrapolated) = 0.365 W/kg

**SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.166 W/kg**

Maximum value of SAR (measured) = 0.291 W/kg



0 dB = 0.285 W/kg = -5.45 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: WCDMA850 RIGHT CHEEK TOUCH\_HIGH\_1D N4313\_NUMERIC
- Test Date: 07/01/2014
- Measured Liquid Temperature: 22.5 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, WCDMA 5 (0); Communication System Band: 4175; Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.89$  S/m;  $\epsilon_r = 41.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.39, 6.39, 6.39); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Right/Touch/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.474 W/kg

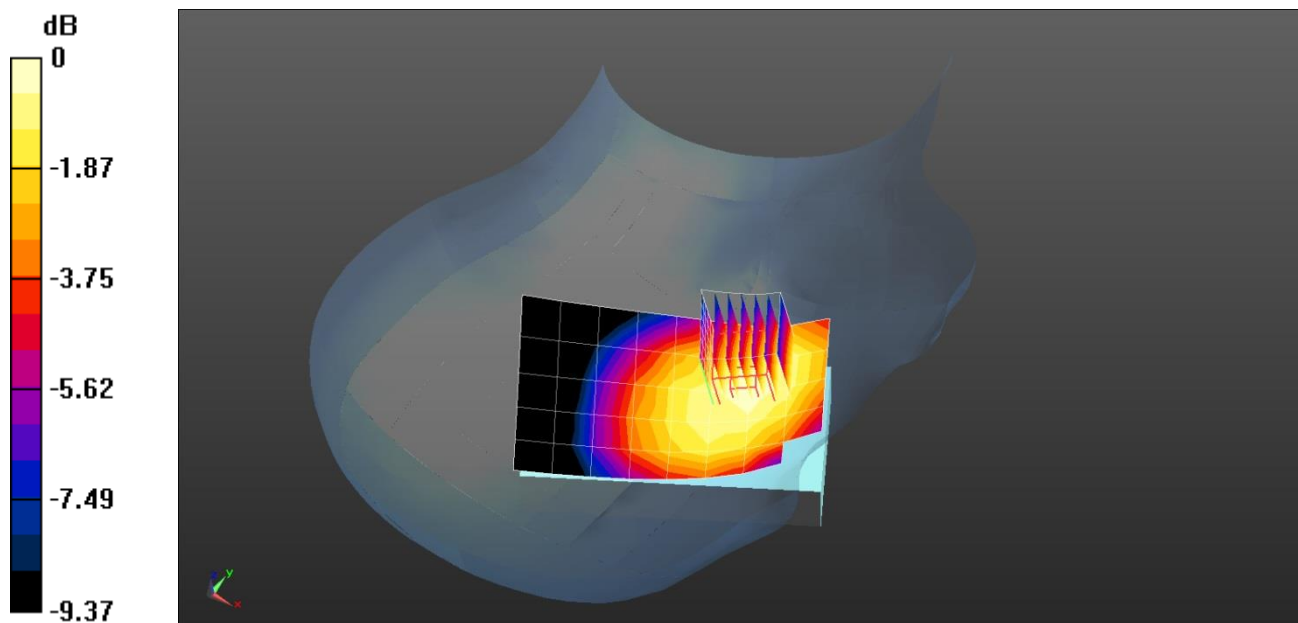
**Right/Touch/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 9.994 V/m; Power Drift = -0.38 dB

Peak SAR (extrapolated) = 0.567 W/kg

**SAR(1 g) = 0.435 W/kg; SAR(10 g) = 0.330 W/kg**

Maximum value of SAR (measured) = 0.477 W/kg



0 dB = 0.477 W/kg = -3.21 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: WCDMA850 BODY REAR 1.5cm\_4175CH\_1D N4313\_NUMERIC
- Test Date: 07/03/2014
- Measured Liquid Temperature: 22.7 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, WCDMA 5 (0); Communication System Band: 4175; Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1  
 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 55.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.17, 6.17, 6.17); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Rear/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.574 W/kg

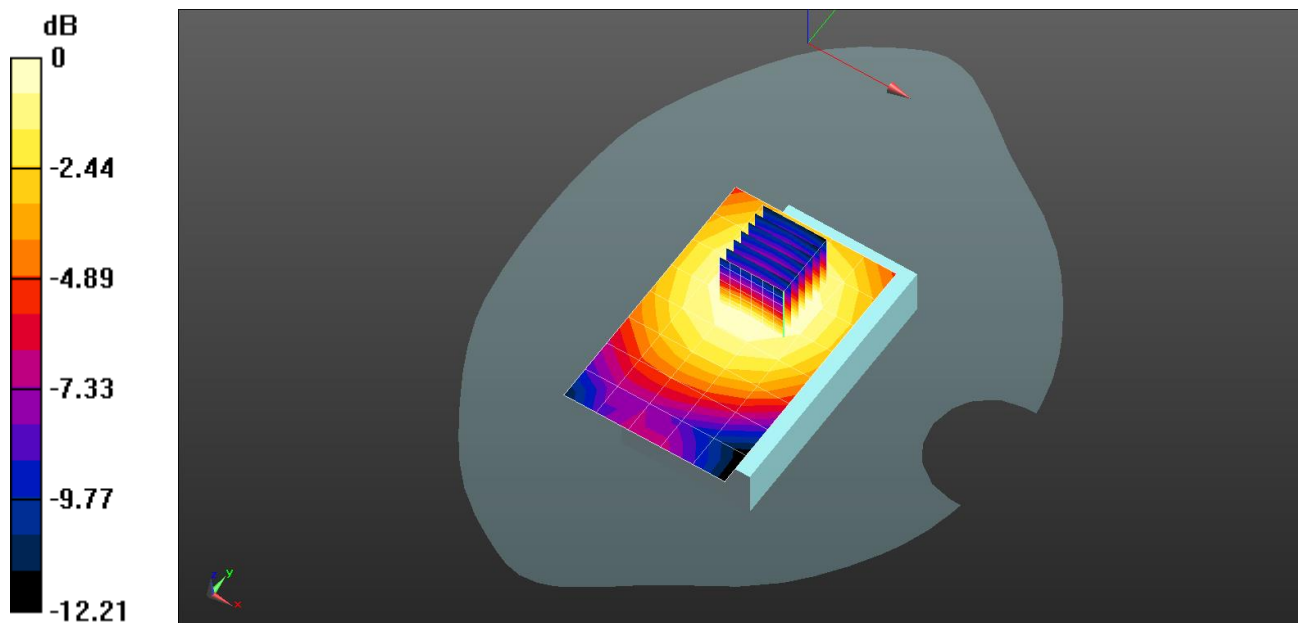
**Body/Rear/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 24.184 V/m; Power Drift = -0.29 dB

Peak SAR (extrapolated) = 0.667 W/kg

**SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.402 W/kg**

Maximum value of SAR (measured) = 0.582 W/kg



0 dB = 0.574 W/kg = -2.41 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: WCDMA1900 LEFT CHEEK TOUCH\_9400CH\_1D N4313\_NUMERIC
- Test Date: 07/07/2014
- Measured Liquid Temperature: 22.3 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, WCDMA 2 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.74$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.85, 4.85, 4.85); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Left/Touch 10/Area Scan (6x9x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 0.318 W/kg

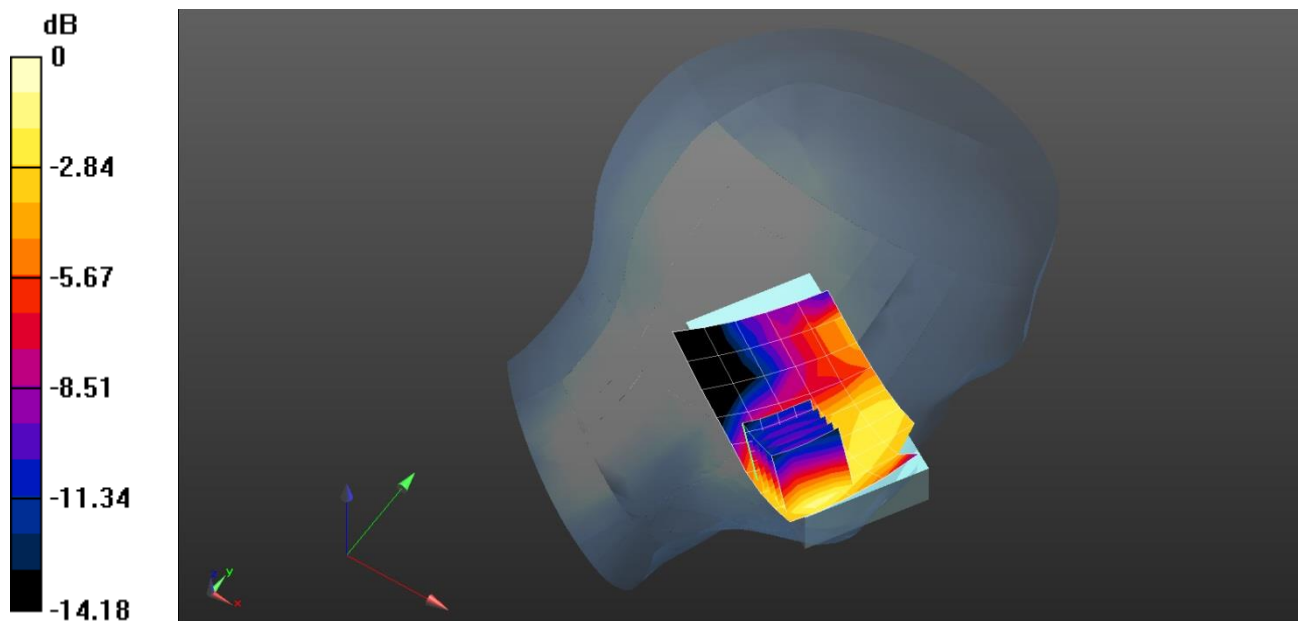
**Left/Touch 10/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 6.808 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 0.459 W/kg

**SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.190 W/kg**

Maximum value of SAR (measured) = 0.355 W/kg



0 dB = 0.355 W/kg = -4.50 dBW/kg



- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: WCDMA1900 BODY REAR 1.5cm\_9400CH\_2D N560x\_QWERTY
- Test Date: 07/09/2014
- Measured Liquid Temperature: 22.2 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, WCDMA 2 (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 1880 MHz; Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.57$  S/m;  $\epsilon_r = 51.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.41, 4.41, 4.41); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Rear/Area Scan (6x10x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

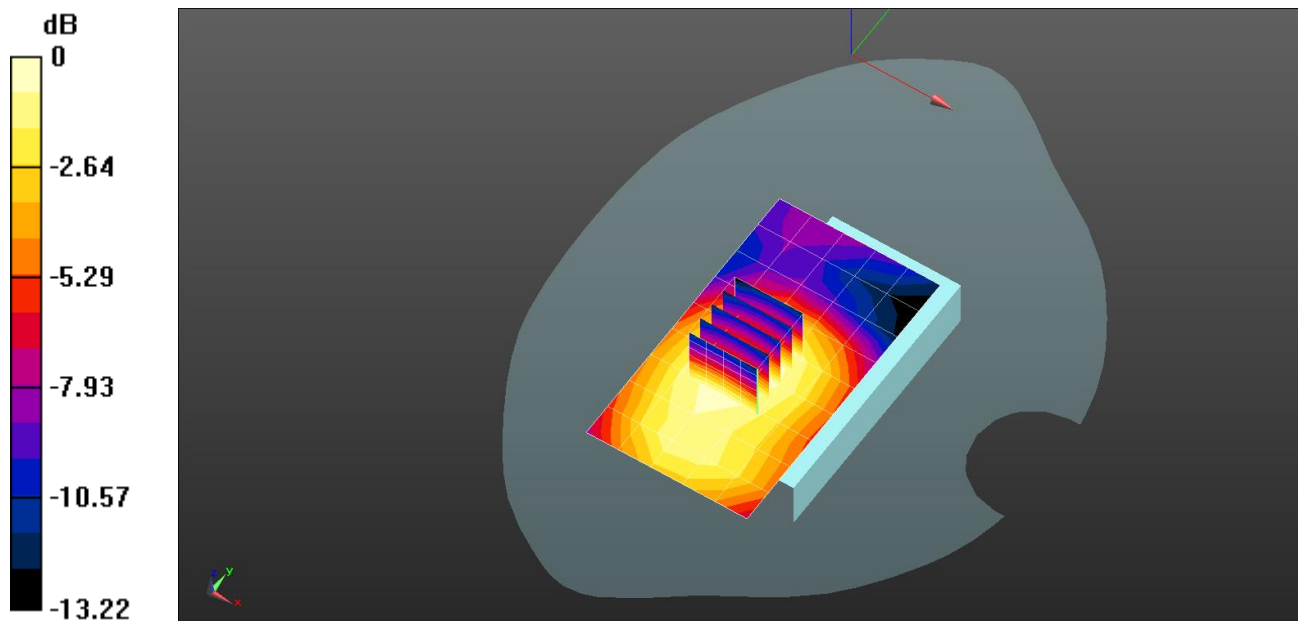
Maximum value of SAR (measured) = 0.520 W/kg

**Body/Rear/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 13.847 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.650 W/kg

**SAR(1 g) = 0.451 W/kg; SAR(10 g) = 0.301 W/kg**



0 dB = 0.520 W/kg = -2.84 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: 802.11b 2437 LEFT CHEEK TOUCH\_6CH\_2D N560x\_QWERTY
- Test Date: 07/11/2014
- Measured Liquid Temperature: 22.6 °C, Ambient Temperature: 21.0 °C

Communication System: UID 0, WLAN (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 2437 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.823$  S/m;  $\epsilon_r = 37.59$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.18, 4.18, 4.18); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Left/Touch/Area Scan (8x12x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.284 W/kg

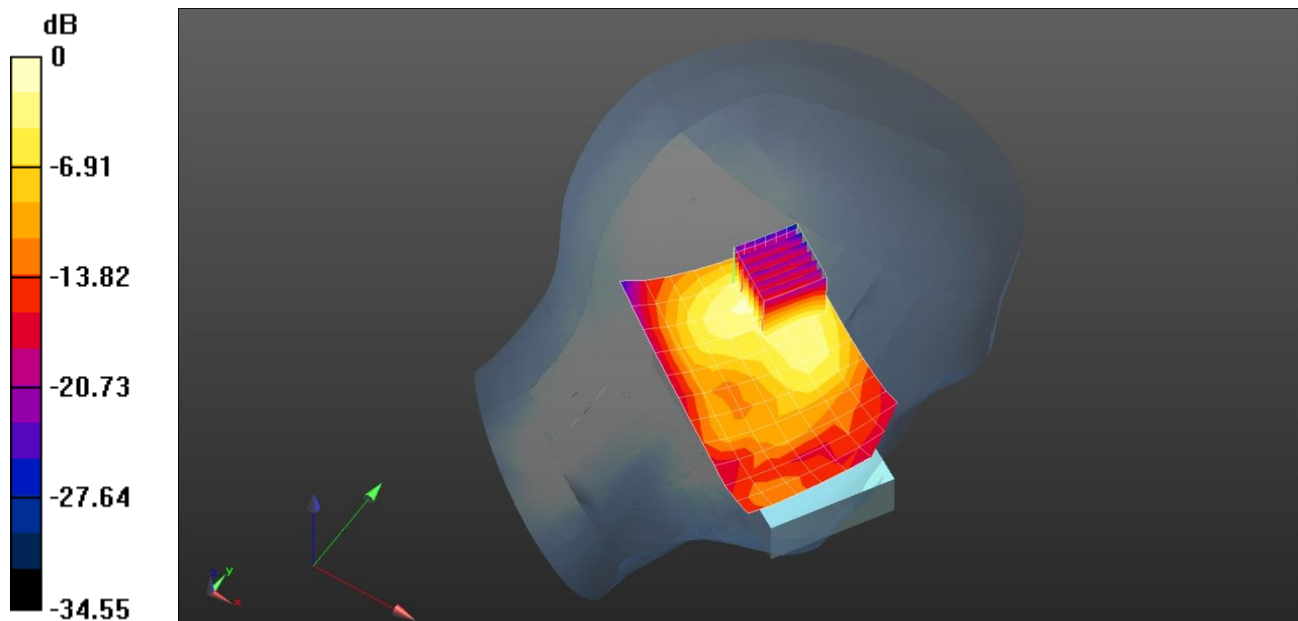
**Left/Touch/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 8.154 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.512 W/kg

**SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.104 W/kg**

Maximum value of SAR (measured) = 0.299 W/kg



0 dB = 0.299 W/kg = -5.24 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: 802.11b 2437 BODY FRONT 1.5cm\_6CH\_2D N560x\_QWERTY
- Test Date: 07/14/2014
- Measured Liquid Temperature: 22.8 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, WLAN (0); Communication System Band: Exported from older format (data unavailable - please correct).; Frequency: 2437 MHz; Communication System PAR: 0 dB; PMF: 1 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.881$  S/m;  $\epsilon_r = 50.548$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASy5 (IEEE/IEC/ANSI C63.19-2007)

DASy Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.78, 3.78, 3.78); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 2.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Left)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASy52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Front/Area Scan (7x10x1):** Measurement grid:  $dx=12$ mm,  $dy=12$ mm

Maximum value of SAR (measured) = 0.0500 W/kg

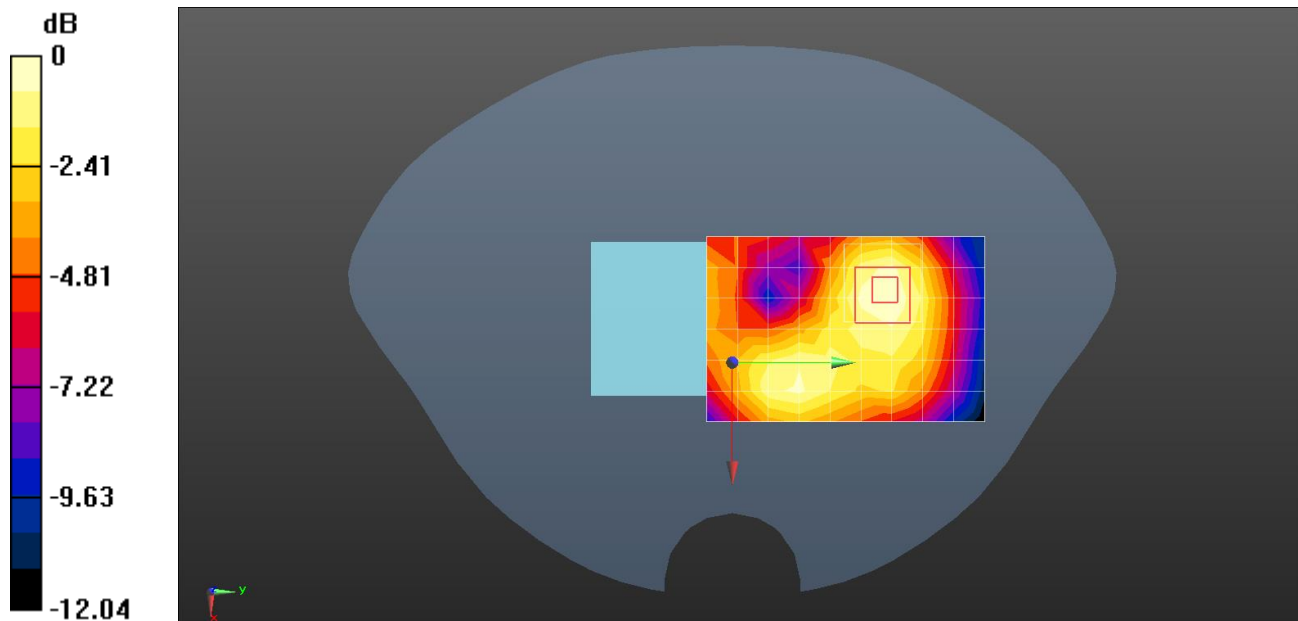
**Body/Front/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 3.151 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.0750 W/kg

**SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.024 W/kg**

Maximum value of SAR (measured) = 0.0501 W/kg



0 dB = 0.0500 W/kg = -13.01 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: 802.11a 5240 LEFT TILT\_48CH\_2D N560x\_QWERTY
- Test Date: 07/16/2014
- Measured Liquid Temperature: 22.4 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, 5G FCC (0); Communication System Band: 5G FCC; Frequency: 5240 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005  
Medium parameters used:  $f = 5240$  MHz;  $\sigma = 4.777$  S/m;  $\epsilon_r = 36.735$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3905; ConvF(4.82, 4.82, 4.82); Calibrated: 26.02.2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -3.0, 23.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Left/TILT/Area Scan (9x15x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

Maximum value of SAR (measured) = 0.405 W/kg

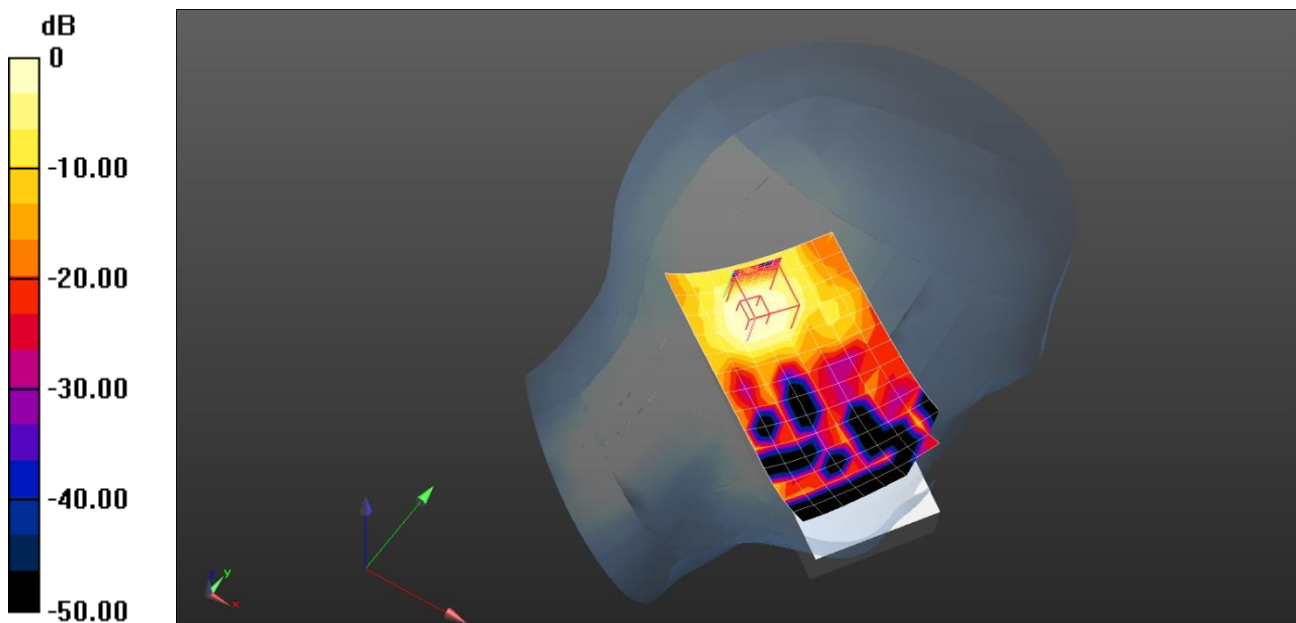
**Left/TILT/Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 4.620 V/m; Power Drift = 0.30 dB

Peak SAR (extrapolated) = 0.833 W/kg

**SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.098 W/kg**

Maximum value of SAR (measured) = 0.443 W/kg



0 dB = 0.405 W/kg = -3.93 dBW/kg

- Test Laboratory: KTL
- Model: PM60G174346E0C
- Position: 802.11a 5500 BODY REAR 1.5cm\_100CH\_2D N560x\_NUMERIC
- Test Date: 07/21/2014
- Measured Liquid Temperature: 22.3 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, 5G FCC (0); Communication System Band: 5G FCC; Frequency: 5500 MHz; Communication System PAR: 0 dB; PMF: 1.12202e-005  
Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.78$  S/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3905; ConvF(3.74, 3.74, 3.74); Calibrated: 26.02.2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection),  $z = -3.0, 23.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**Body/Rear/Area Scan (9x16x1):** Measurement grid:  $dx=10$ mm,  $dy=10$ mm

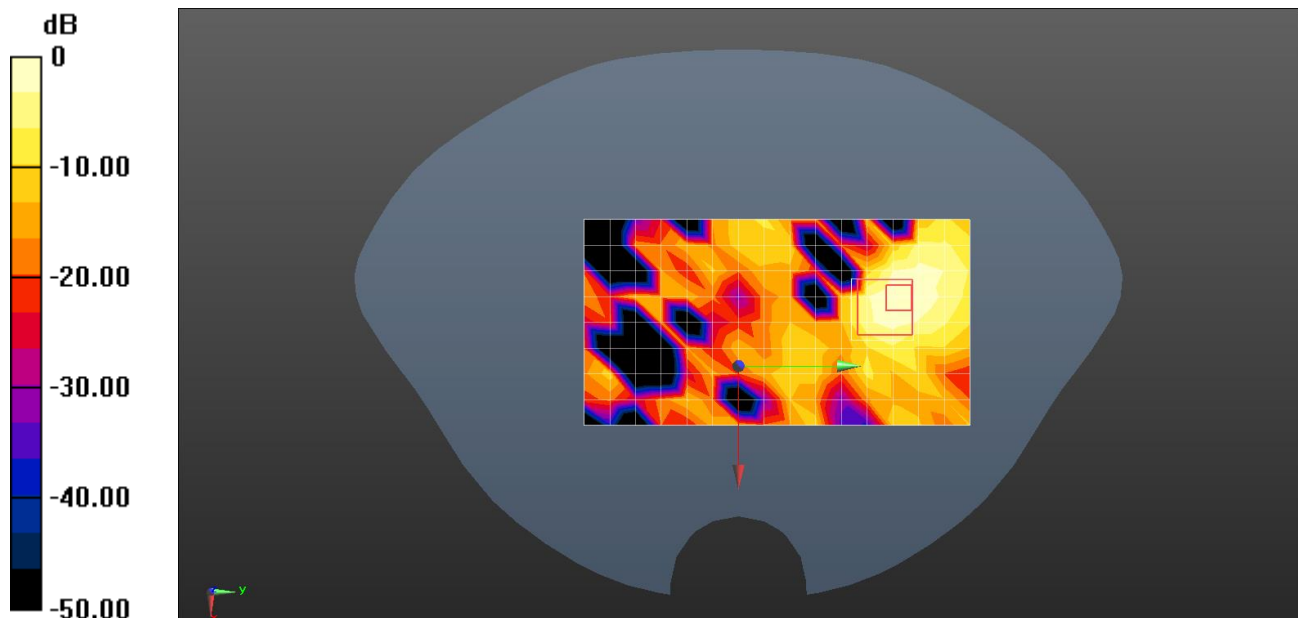
Maximum value of SAR (measured) = 0.113 W/kg

**Body/Rear/Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=2$ mm

Reference Value = 0.712 V/m; Power Drift = 1.56 dB

Peak SAR (extrapolated) = 0.300 W/kg

**SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.013 W/kg**



0 dB = 0.113 W/kg = -9.47 dBW/kg

**835 MHz Head – Verification DATA (D835V2 – 481)**

- Test Date: 07/01/2014

- Measured Liquid Temperature: 22.5 °C, Ambient Temperature: 22.1 °C

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.89 \text{ S/m}$ ;  $\epsilon_r = 41.5$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.39, 6.39, 6.39); Calibrated: 25.02.2014;
  - Modulation Compensation:
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**835MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.90 W/kg

**835MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

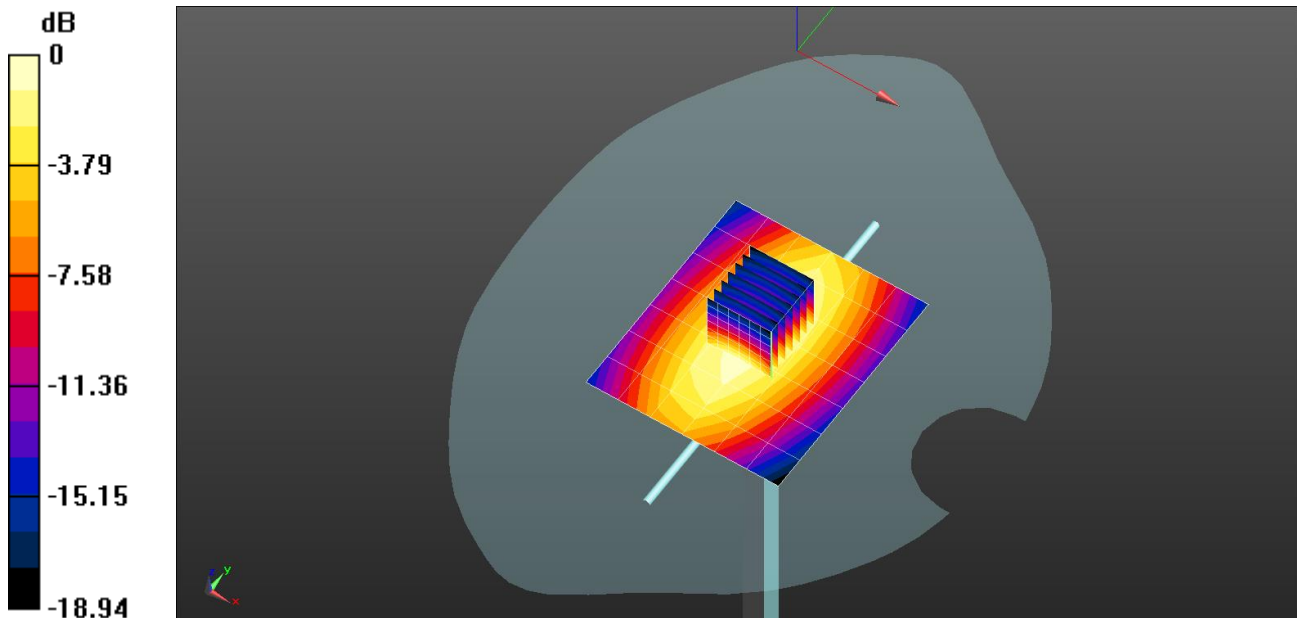
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 58.621 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 3.69 W/kg

**SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.65 W/kg**

Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 2.90 W/kg = 4.62 dBW/kg

**835 MHz Body – Verification DATA (D835V2 – 481)**

- Test Date: 07/03/2014

- Measured Liquid Temperature: 22.7 °C, Ambient Temperature: 22.1 °C

Communication System: UID 0, CW (0); Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.96$  S/m;  $\epsilon_r = 55.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(6.17, 6.17, 6.17); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**835MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.01 W/kg

**835MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

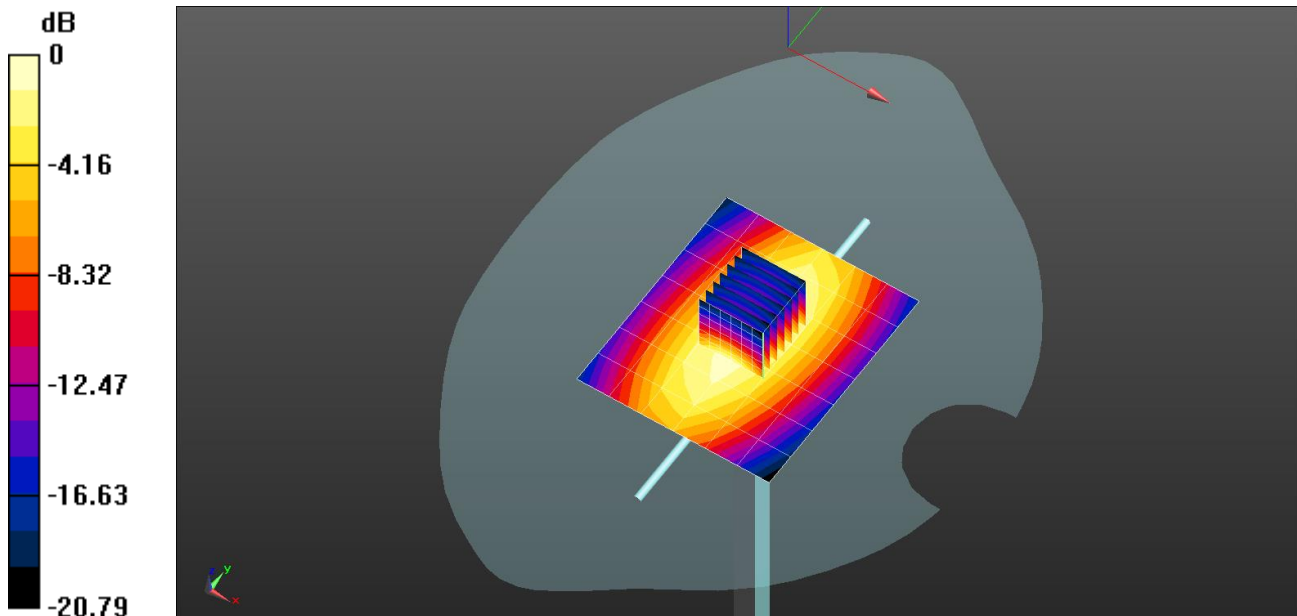
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.277 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.82 W/kg

**SAR(1 g) = 2.6 W/kg; SAR(10 g) = 1.72 W/kg**

Maximum value of SAR (measured) = 3.02 W/kg



0 dB = 3.01 W/kg = 4.78 dBW/kg

**1900 MHz Head- Verification DATA (D1900V2 – 5d038)**

- Test Date: 07/07/2014

- Measured Liquid Temperature: 22.3 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz);  
Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.45$  S/m;  $\epsilon_r = 39.75$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.85, 4.85, 4.85); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**1900MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 12.3 W/kg

**1900MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

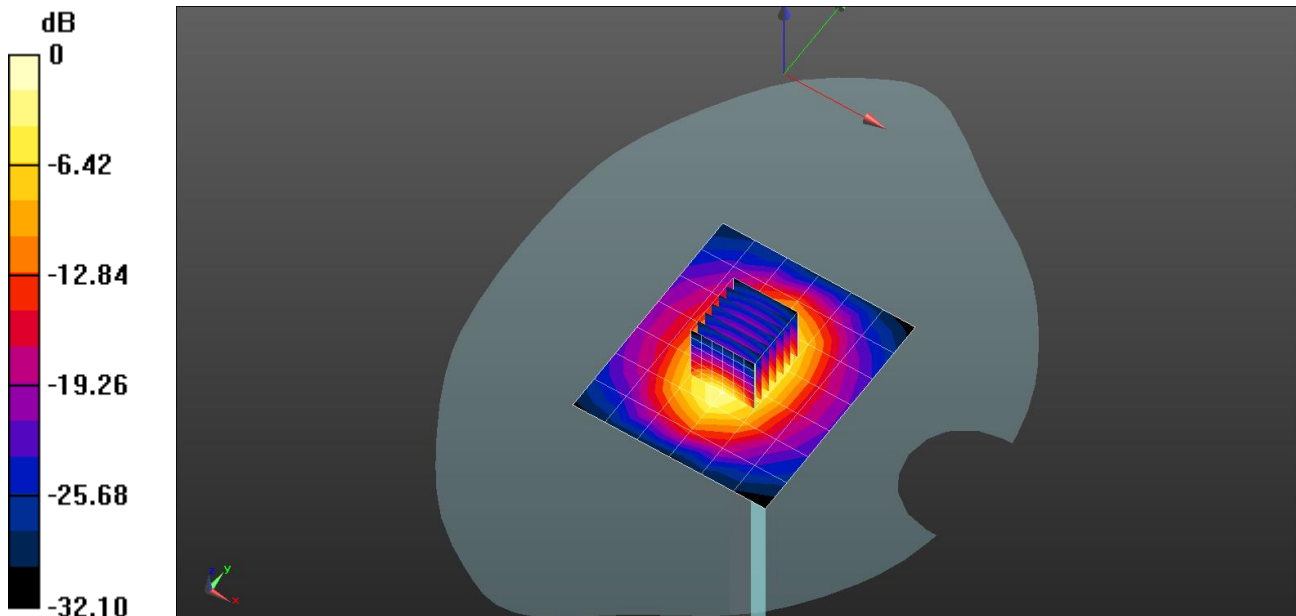
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.124 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.9 W/kg

**SAR(1 g) = 10.5 W/kg; SAR(10 g) = 5.56 W/kg**

Maximum value of SAR (measured) = 13.3 W/kg



0 dB = 12.3 W/kg = 10.89 dBW/kg



**1900 MHz Body- Verification DATA (D1900V2 – 5d038)**

- Test Date: 07/09/2014

- Measured Liquid Temperature: 22.2 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, CW (0); Communication System Band: D1900 (1900.0 MHz);  
Frequency: 1900 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.57$  S/m;  $\epsilon_r = 51.05$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.41, 4.41, 4.41); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**1900MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 12.9 W/kg

**1900MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

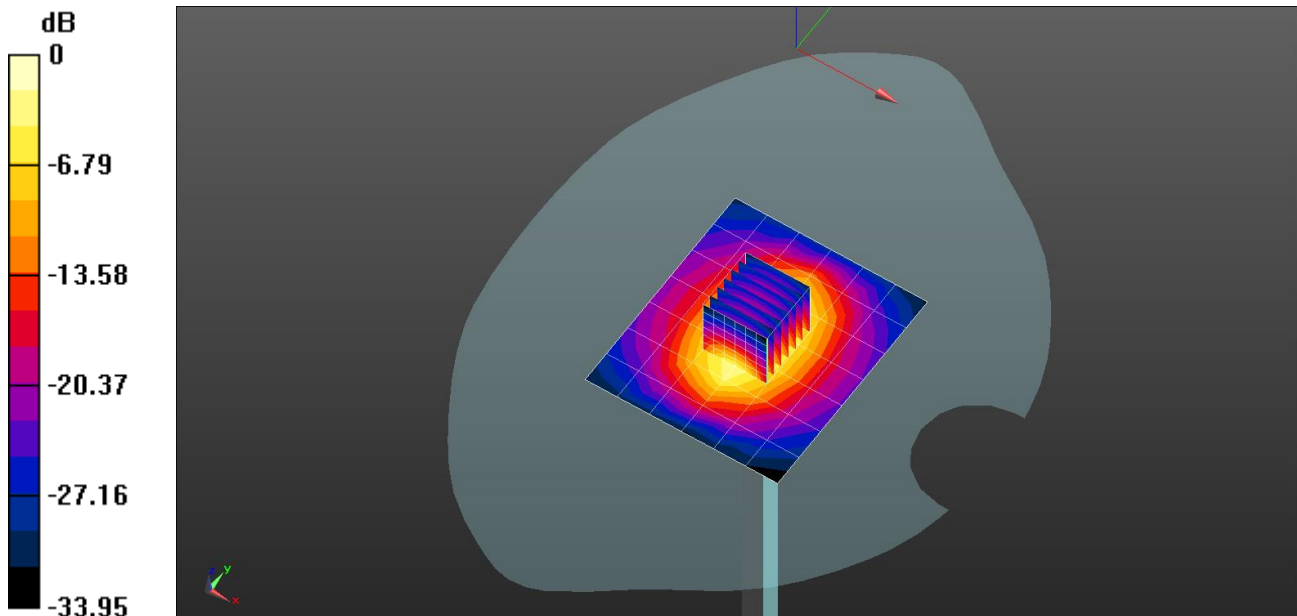
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.271 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 18.6 W/kg

**SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.63 W/kg**

Maximum value of SAR (measured) = 13.4 W/kg



0 dB = 12.9 W/kg = 11.10 dBW/kg

**2450 MHz Head- Verification DATA (D2450V2- 746)**

- Test Date: 07/11/2014

- Measured Liquid Temperature: 22.6 °C, Ambient Temperature: 22.0 °C

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);  
Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.84$  S/m;  $\epsilon_r = 37.547$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(4.18, 4.18, 4.18); Calibrated: 25.02.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**2450MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 17.1 W/kg

**2450MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

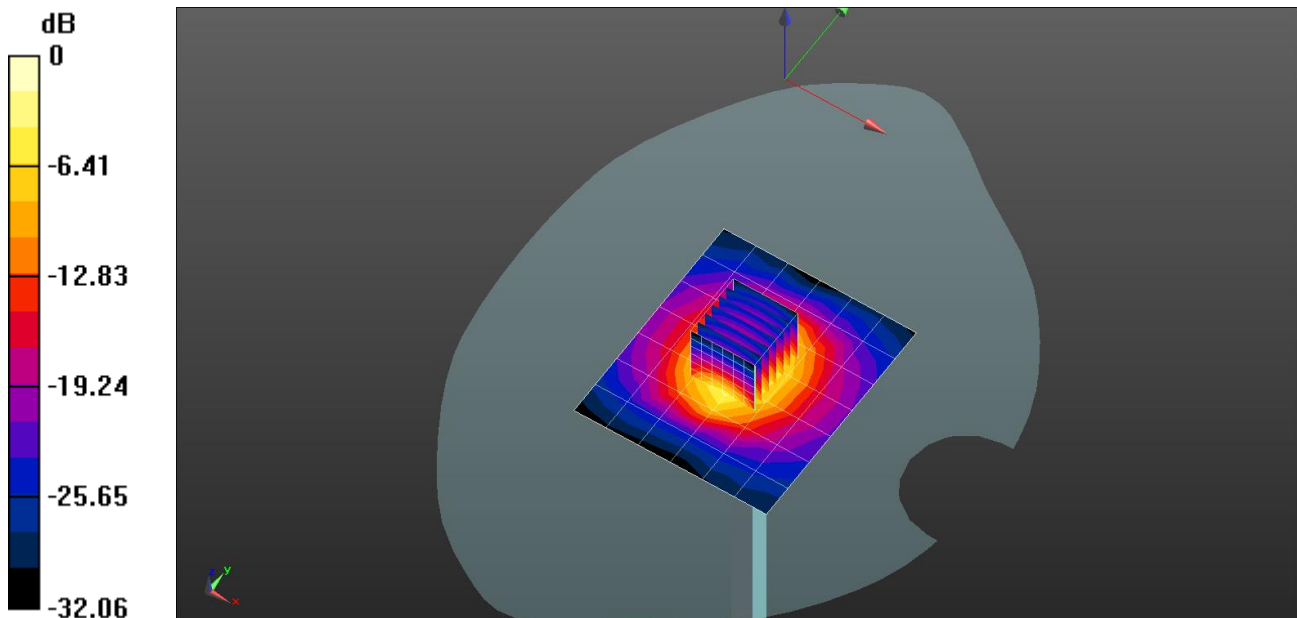
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 101.9 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 28.2 W/kg

**SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.39 W/kg**

Maximum value of SAR (measured) = 18.0 W/kg



0 dB = 17.1 W/kg = 12.32 dBW/kg

**2450 MHz Body- Verification DATA (D2450V2- 746)**

- Test Date: 07/14/2014

- Measured Liquid Temperature: 22.8 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, CW (0); Communication System Band: D2450 (2450.0 MHz);  
Frequency: 2450 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.897$  S/m;  $\epsilon_r = 50.545$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: ES3DV2 - SN3020; ConvF(3.78, 3.78, 3.78); Calibrated: 25.02.2014;
  - Modulation Compensation:
- Sensor-Surface: 3mm (Mechanical Surface Detection),  $z = 1.0, 32.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Left)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**2450MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Area Scan (7x8x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (measured) = 16.0 W/kg

**2450MHz/d=10mm, Pin=xx mW, dist=3.0mm (ES-Probe) 2/Zoom Scan (7x7x7) (5x5x7)/Cube 0:**

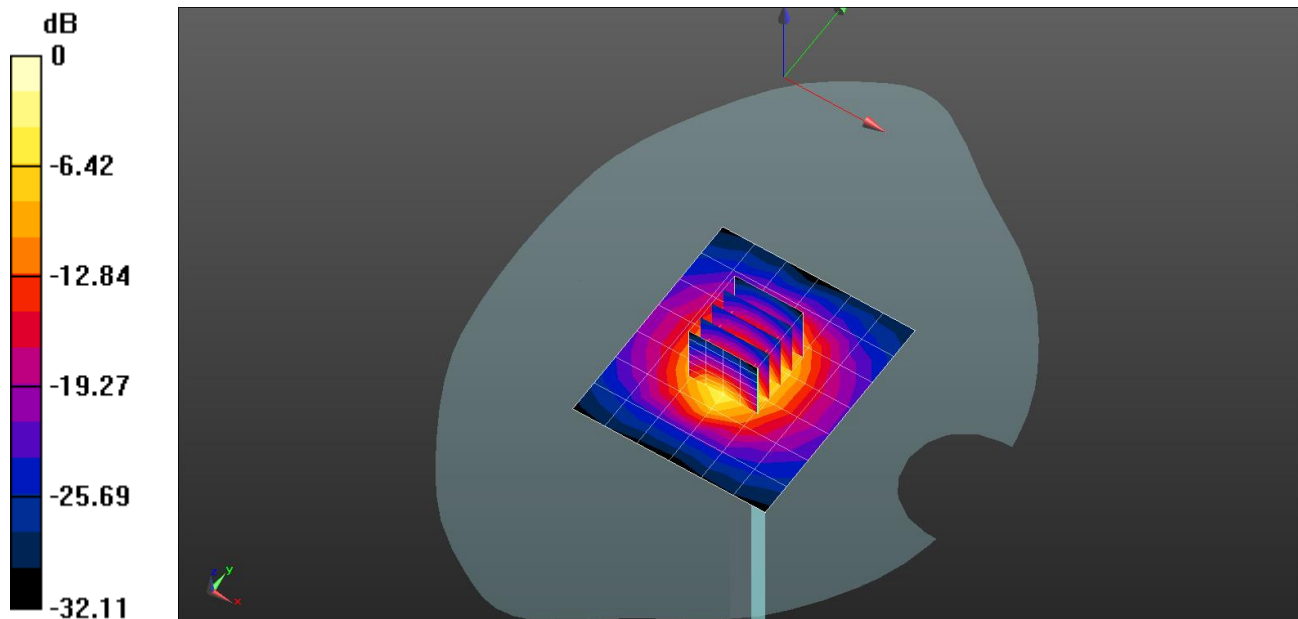
Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 96.914 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 27.3 W/kg

**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.12 W/kg**

Maximum value of SAR (measured) = 17.2 W/kg



0 dB = 16.0 W/kg = 12.03 dBW/kg

**5200 MHz Head- Verification DATA (D5GHzV2- 1147)**

- Test Date: 07/16/2014

- Measured Liquid Temperature: 22.4 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);  
Frequency: 5200 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.727$  S/m;  $\epsilon_r = 36.596$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASy5 (IEEE/IEC/ANSI C63.19-2007)

DASy Configuration:

- Probe: EX3DV4 - SN3905; ConvF(4.82, 4.82, 4.82); Calibrated: 26.02.2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASy52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5200 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.6 W/kg

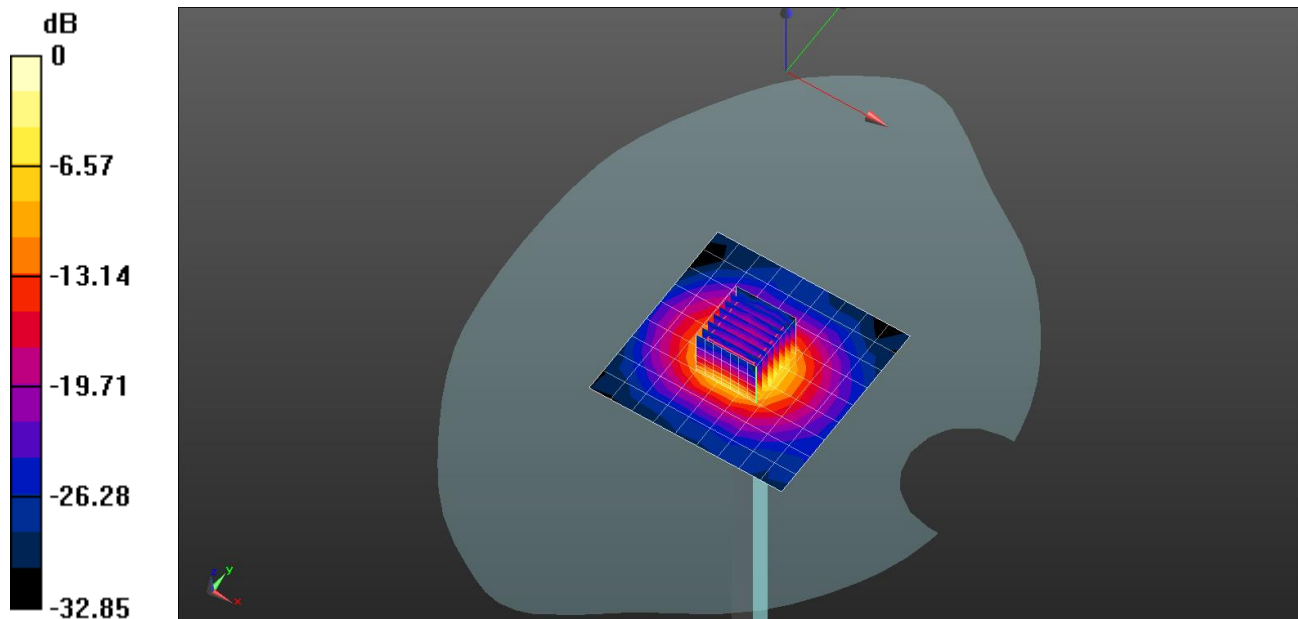
**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5200 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 69.960 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 32.7 W/kg

**SAR(1 g) = 8.12 W/kg; SAR(10 g) = 2.37 W/kg**

Maximum value of SAR (measured) = 18.8 W/kg



0 dB = 13.6 W/kg = 11.34 dBW/kg

**5500 MHz Head- Verification DATA (D5GHzV2- 1147)**

**- Test Date: 07/18/2014**

**- Measured Liquid Temperature: 22.2 °C, Ambient Temperature: 23.0 °C**

Communication System: UID 0, CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5500 MHz; Communication System PAR: 0 dB; PMF: 1  
 Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.053$  S/m;  $\epsilon_r = 35.827$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3905; ConvF(4.52, 4.52, 4.52); Calibrated: 26.02.2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASYS 52.8.7(1137); SEMCAD X 14.6.10(7164)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5500 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.2 W/kg

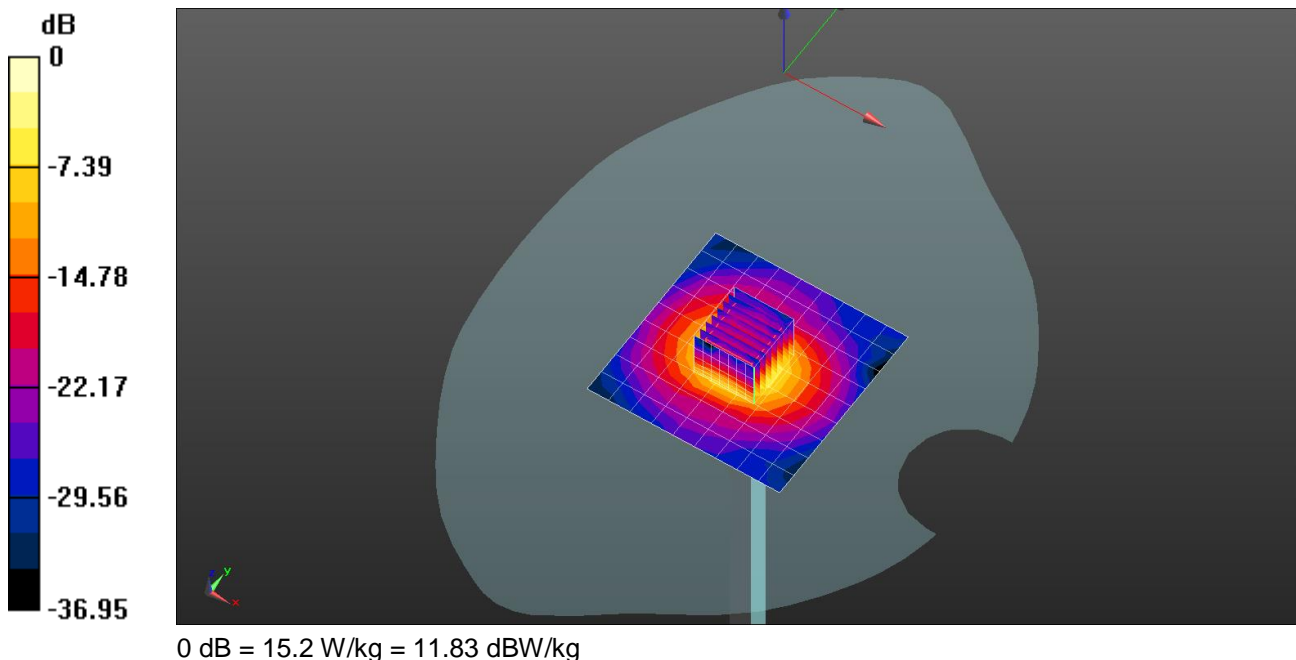
**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5500 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 73.160 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 37.6 W/kg

**SAR(1 g) = 8.96 W/kg; SAR(10 g) = 2.56 W/kg**

Maximum value of SAR (measured) = 21.2 W/kg



**5500 MHz Body- Verification DATA (D5GHzV2- 1147)**

- Test Date: 07/21/2014

- Measured Liquid Temperature: 22.3 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);  
Frequency: 5500 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.78$  S/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3905; ConvF(3.74, 3.74, 3.74); Calibrated: 26.02.2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5500 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.3 W/kg

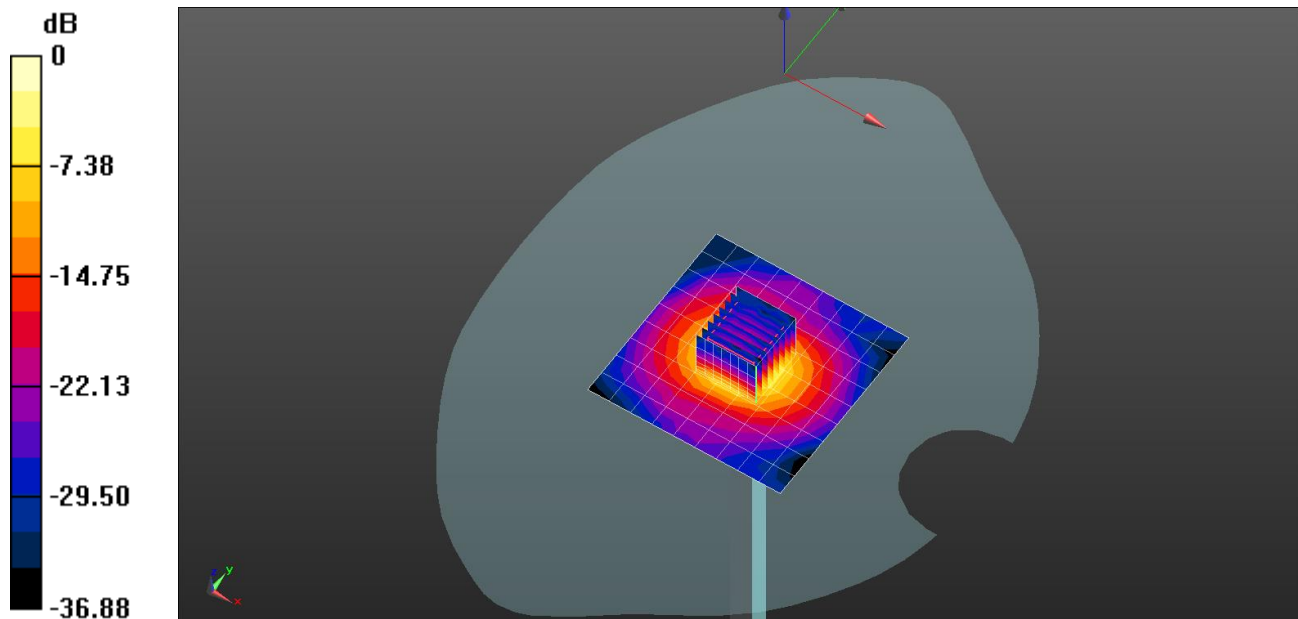
**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5500 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.829 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 34.2 W/kg

**SAR(1 g) = 8.5 W/kg; SAR(10 g) = 2.39 W/kg**

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 13.3 W/kg = 11.23 dBW/kg

**5800 MHz Head- Verification DATA (D5GHzV2- 1147)**

- Test Date: 07/23/2014

- Measured Liquid Temperature: 22.5 °C, Ambient Temperature: 23.0 °C

Communication System: UID 0, CW; Communication System Band: D5GHz (5000.0 - 6000.0 MHz);  
Frequency: 5800 MHz; Communication System PAR: 0 dB; PMF: 1  
Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.464$  S/m;  $\epsilon_r = 35.218$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3905; ConvF(5.2, 5.2, 5.2); Calibrated: 26.02.2014;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection),  $z = 1.0, 25.0$
- Electronics: DAE4 Sn1422; Calibrated: 13.01.2014
- Phantom: SAM with CRP v5.0(Right)\_2014\_03\_05; Type: QD000P40CD; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5800 MHz/Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 14.6 W/kg

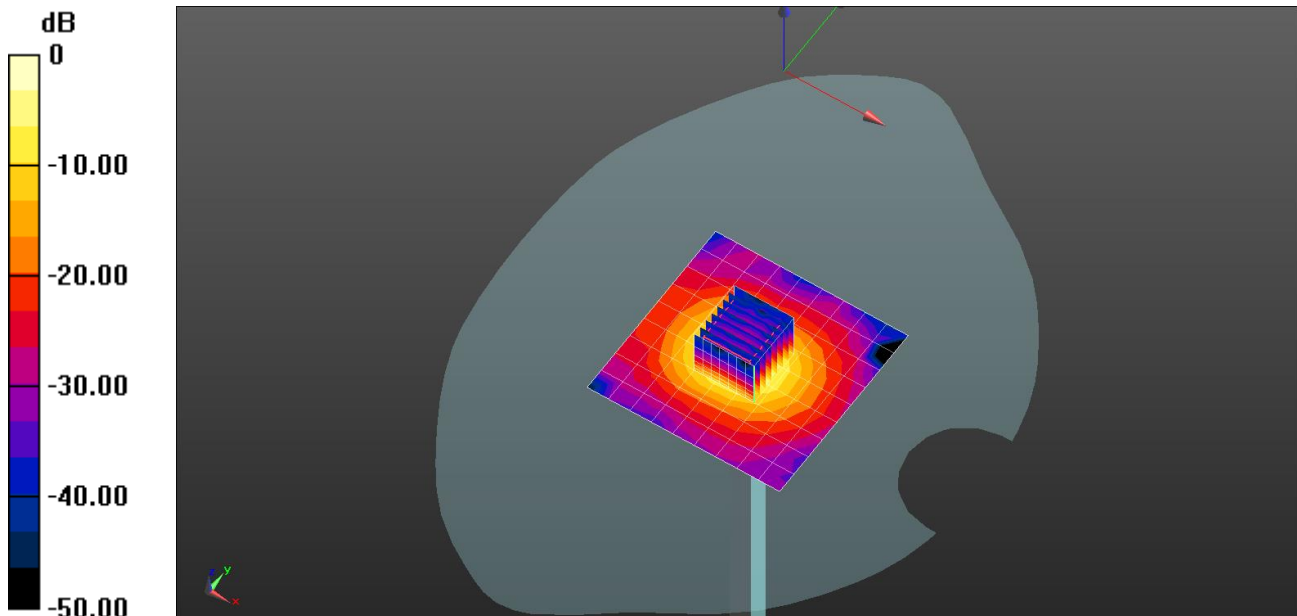
**System Performance Check with D5GHzV2 Dipole (graded grid)/d=10mm, Pin=100mW, f=5800 MHz/Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.354 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 37.9 W/kg

**SAR(1 g) = 8.23 W/kg; SAR(10 g) = 2.34 W/kg**

Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 14.6 W/kg = 11.65 dBW/kg